

INTERNATIONAL SEARCH REPORT

 Internati Application No
 PCT/BE 03/00114

 A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 C12Q1/22 A23L3/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12Q A23L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

FSTA, EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 486 459 A (BURNHAM JEFFREY C ET AL) 23 January 1996 (1996-01-23) column 13, line 13 -column 16, line 8; claims; examples column 1, line 20 - line 28 ---	1-52
X	EP 1 138 777 A (KONISHIROKU PHOTO IND) 4 October 2001 (2001-10-04) page 8, paragraph 58; claims; example 1 ---	1-52
X	US 5 739 004 A (WOODSON LEWIS P) 14 April 1998 (1998-04-14) column 7, line 19 -column 8, line 42 examples 1,2,6-11 claims 1,5-7,10,11,18-22,37-46,59,60; example 12 --- -/--	1-52

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

6 November 2003

Date of mailing of the international search report

26/11/2003

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 355 448 B1 (ASMUS ROBERT A ET AL) 12 March 2002 (2002-03-12) column 3, line 59 - line 63 column 5, line 19 - line 37; claims; examples 6-10	
Y	--- HAENTJENS T H ET AL: "The use of alpha -amylase at reduced water content to develop time temperature integrators for sterilization processes." LEBENSMITTEL-WISSENSCHAFT UND -TECHNOLOGIE 31 (5) 467-472 1998 CORRESPONDENCE (REPRINT) ADDRESS, M. E. HENDRICKX, LAB. OF FOOD TECH., DEP. OF FOOD & MICROBIAL TECH., KATHOLIEKE UNIV. LEUVEN, B-3001, HEVERLEE, BELGIUM, XP002260356 page 467, paragraph 1 -page 468, paragraph 3	1-61
Y	--- TUCKER G S ET AL: "Application of a biochemical time-temperature integrator to estimate pasteurisation values in continuous food processes." INNOVATIVE FOOD SCIENCE AND EMERGING TECHNOLOGIES 3 (2) 165-174 2002 PROCESS & DEV. DEP., CAMPDEN & CHORLEYWOOD FOOD RES. ASS., CHIPPING CAMPDEN GL55 6LD, UK, XP001156113 page 166, column 2, paragraph 4 -page 167, last paragraph page 173, paragraphs 2,3	1-61
Y	--- LOEY A VAN ET AL: "Quantitative evaluation of thermal processes using time-temperature integrators." TRENDS IN FOOD SCIENCE & TECHNOLOGY 1996 CORRESPONDENCE (REPRINT) ADDRESS, M. HENDRICKX, DEP. OF FOOD & MICROBIAL TECH., LAB. OF FOOD TECH., FAC. OF AGRIC. & APPLIED BIOL. SCI., KATHOLIEKE UNI, vol. 7, no. 1, pages 16-26, XP002260357 page 21, column 1, paragraph 3 -column 2, paragraph 2 page 22, column 2, last paragraph -page 23, column 1, paragraph 1 --- -/--	1-52

INTERNATIONAL SEARCH REPORT

International Application No

PCT/BE 03/00114

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Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>CORDT S DE ET AL: "DSC and protein-based time-temperature integrators: case study of Na-amylase stabilized by polyols and/or sugar."</p> <p>BIOTECHNOLOGY AND BIOENGINEERING 1994 CORRESPONDENCE (REPRINT) ADDRESS, M. HENDRICKX, FOOD PRESERVATION UNIT, CENT. OF FOOD SCI. & TECH., FAC. OF AGRIC. & APPLIED BIOL. SCI., KATHOLIEKE UNIV., vol. 44, no. 7, pages 859-865, XP001156109 abstract</p> <p>---</p>	1-52
Y	<p>DE CORDT S F ET AL: "CONVENIENCE OF IMMOBILIZED BACILLUS LICHENIFORMIS -AMYLASE AS TIME-TEMPERATURE-INTEGRATOR (TTI)"</p> <p>JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY. (INTERNATIONAL JOURNAL OF BIOTECHNICAL AND CHEMICAL PROCESSES), ELSEVIER APPLIED SCIENCE PUBLISHERS. BARKING, GB, vol. 59, no. 2, 1 February 1994 (1994-02-01), pages 193-199, XP000425515 ISSN: 0268-2575 abstract</p> <p>---</p>	1-61
Y	<p>HENDRICKX M ET AL: "Validation of a time-temperature-integrator for thermal processing of foods under pasteurization conditions."</p> <p>INTERNATIONAL JOURNAL OF FOOD SCIENCE & TECHNOLOGY 1992 LAB. OF FOOD TECH., KATHOLICKE UNIV. LEUVEN, 3001 HEVERLEE, BELGIUM, vol. 27, no. 1, pages 21-31, XP009020571 abstract</p> <p>page 24, last paragraph -page 25, paragraph 2</p> <p>page 29, last paragraph -page 30, paragraph 1</p> <p>---</p> <p>-/--</p>	1-61

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PCT/BE 03/00114

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A	<p>LY NGUYEN B ET AL: "Purification, characterization, thermal, and high-pressure inactivation of pectin methylesterase from bananas (cv. Cavendish)."</p> <p>BIOTECHNOLOGY AND BIOENGINEERING 78 (6) 683-691 2002 CORRESPONDENCE (REPRINT) ADDRESS, I. M. HENDRICKX, LAB. OF FOOD TECH., DEP. OF FOOD & MICROBIAL TECH., FAC. OF AGRIC. & APPLIED BIOL. SCI., KATHOLIEKE UNIV. OF LEUVEN, B-3001 LEUVEN, BELGIUM. TEL. ;</p> <p>20 June 2002 (2002-06-20), XP002260359 abstract</p> <p>---</p>	
A	<p>MAESMANS G ET AL: "Evaluation of process value distribution with time temperature integrators."</p> <p>FOOD RESEARCH INTERNATIONAL 1994 CORRESPONDENCE (REPRINT) ADDRESS, M. HENDRICKX, FAC. OF AGRIC. & APPLIED BIOL. SCI., CENT. FOR FOOD SCI. & TECH., KATHOLIEKE UNIV. TE LEUVEN, B-3001, LEUVEN, B,</p> <p>vol. 27, no. 5, pages 413-423, XP009020504</p> <p>page 414, column 2, paragraph 3 -page 416, column 1, last paragraph</p> <p>-----</p>	

INTERNATIONAL SEARCH REPORT

Information on patent family members

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PCT/BE 03/00114

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